

# Sohigh BAT-1200AH-OPzV

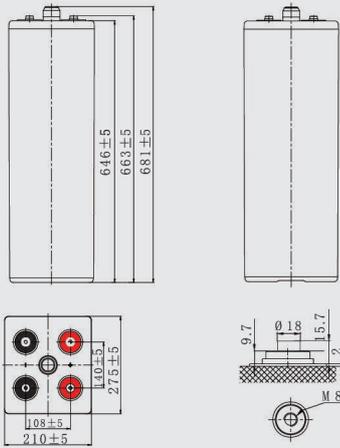
Solar OPzV Battery



## Specifications

Rated Voltage	2V	
Nominal Capacity	1200Ah	(C <sub>10</sub> , 1.80V/cell)
Dimension	Length	275±5mm(10.83 in.)
	Width	210±5mm(8.27 in.)
	Container Height	646±5mm(25.43 in.)
	Total Height	681±5mm(26.81 in.)
Terminal	M8	
Container Material	ABS	
Rated Capacity (25°C)	1560.0 Ah	(100hr, 15.6A, 1.80V/cell)
	1200.0 Ah	(10hr, 120.0A, 1.80V/cell)
	1046.5 Ah	(5hr, 209.3A, 1.75V/cell)
	929.1Ah	(3hr, 309.7A, 1.75V/cell)
	669.5 Ah	(1hr, 669.5A, 1.67V/cell)
Max. Discharge Current (5s)	9600A	
Internal Resistance(25°C)	Approx.0.43mΩ	
Operating Temp.Range	Discharge	-20°C~55°C (-4°F~131°F)
	Charge	0°C~40°C (32°F~104°F)
	Storage	-20°C~50°C (-4°F~122°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Max.Charging Current(25°C)	300.0A	
Charge voltage(25°C)	Float	2.25V
	Temp. Coefficient	-3mV/cell/°C
	Cycle(Equalization)	2.35~2.40V
Effect of temp. to Capacity	40°C (104°F)	106%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤ 3% per month at 25°C	

## Dimensions (mm)



## Solar & Wind applications parameters settings

Over voltage disconnect	2.45±0.01V/cell @ 20~25°C
Regulation/equalize voltage	2.40±0.01V/cell @ 20~25°C
Array reconnection voltage	2.25±0.005V/cell @ 20~25°C
Float voltage setting	2.27±0.005V/cell @ 20~25°C
Low voltage alarm voltage	1.95±0.005V/cell @ 20~25°C
Low voltage disconnect	1.90±0.005V/cell @ 20~25°C
Load reconnect voltage	2.09±0.01V/cell @ 20~25°C
Temp. compensate coefficient	-5mV/cell/°C

## Solar OPzV Battery



## Constant Current Discharge (Amperes) at 25°C (77°F)

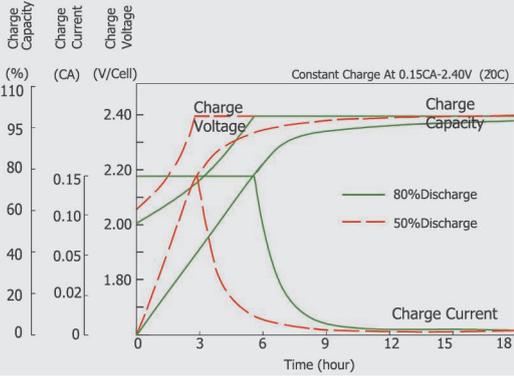
F.V/Time	1h	2h	3h	5h	8h	10h	24h	48h	72h	100h	120h
1.85V/cell	536.3	362.7	278.4	190.4	133.5	112.5	53.4	27.9	20.1	15.2	13.1
1.80V/cell	601.2	397.2	302.8	205.2	142.8	120.0	55.3	29.0	20.8	15.6	13.5
1.75V/cell	625.1	411.0	309.7	209.3	145.2	122.1	55.6	29.7	21.4	15.9	13.7
1.70V/cell	652.4	421.4	315.9	212.4	147.3	123.4	56.5	30.2	21.6	16.1	13.9
1.67V/cell	669.5	428.3	321.7	215.8	149.0	124.5	57.0	30.5	21.8	16.4	14.1
1.60V/cell	679.8	435.2	325.5	217.9	150.0	125.5	57.5	30.9	21.9	16.6	14.2

## Constant Power Discharge (Watts/cell) at 25°C (77°F)

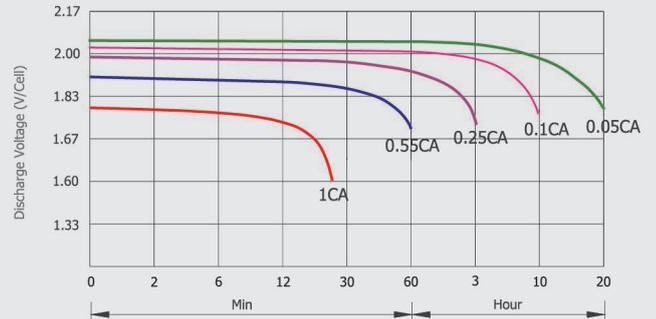
F.V/Time	1h	2h	3h	5h	8h	10h	24h	48h	72h	100h	120h
1.85V/cell	1035.0	704.6	543.0	374.0	264.6	223.5	106.7	55.9	40.3	30.6	26.4
1.80V/cell	1158.0	770.2	587.7	401.5	282.8	238.3	110.3	58.0	41.8	31.3	27.1
1.75V/cell	1195.6	787.5	598.0	408.3	287.0	241.7	110.9	59.2	42.8	31.9	27.5
1.70V/cell	1236.6	804.8	608.3	415.2	290.1	244.1	112.5	60.3	43.2	32.3	27.9
1.67V/cell	1260.5	818.6	618.7	418.6	292.8	246.2	113.4	60.9	43.5	32.9	28.2
1.60V/cell	1274.1	825.5	622.1	422.1	294.2	247.5	114.3	61.5	43.7	33.2	28.5

NOTICE: Manual measurement, product specifications and dimensions may have errors, subject to actual receipt.

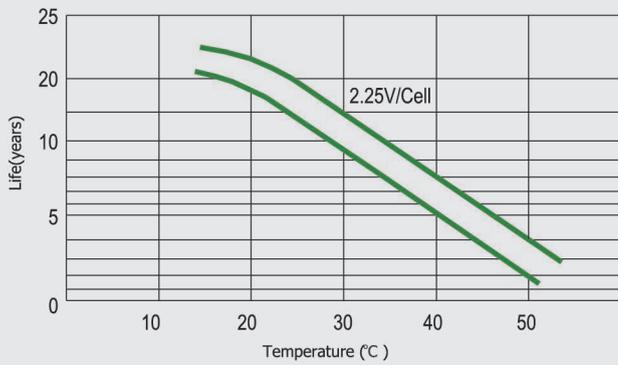
## Discharge Characteristics



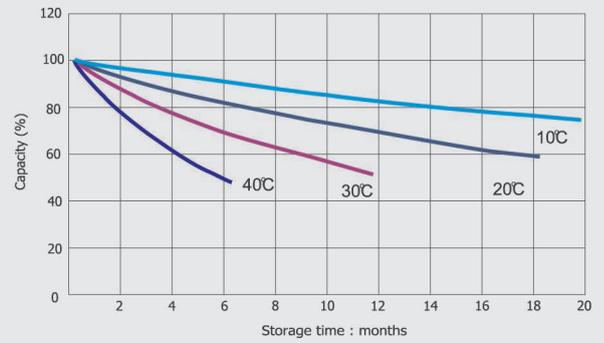
## Charging Characteristics



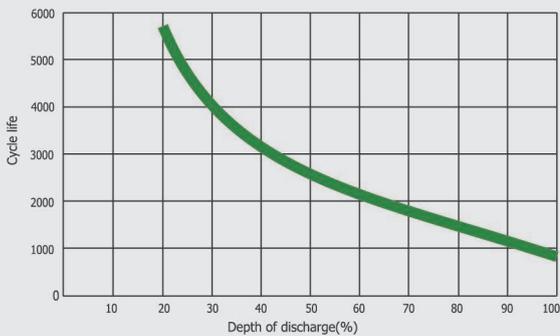
## Temperature vs Float Life



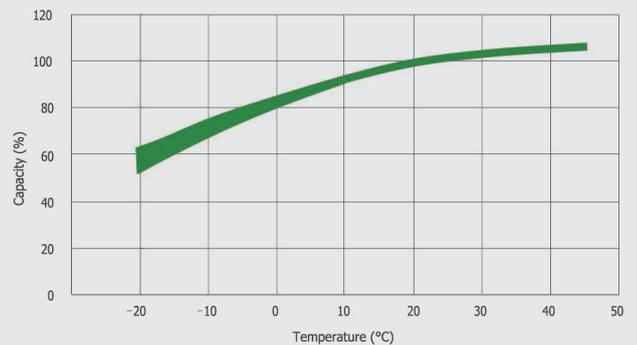
## Self Discharge Characteristics



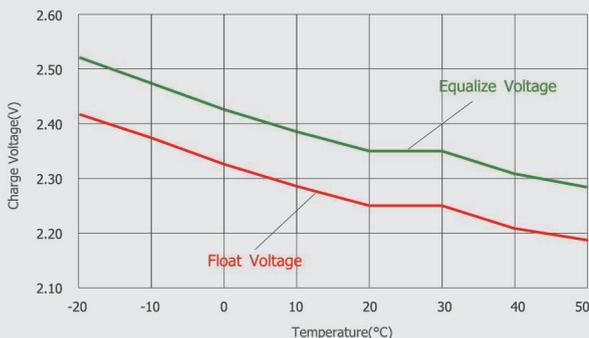
## Cycle Life vs Depth of Discharge



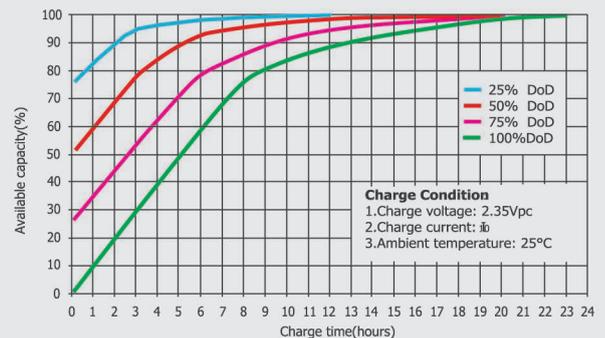
## Capacity vs Temperature



## Charge Voltage Capacity vs Temperature



## Charge Capacity vs Time



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